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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/731,674

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Daniel J. Lenehan

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EXAMINER

CIRIC, LJILJANA V

ART UNIT	PAPER NUMBER
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3744

MAIL DATE	DELIVERY MODE
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10/10/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/731,674

Applicant(s)

LENEHAN ET AL.

Examiner

Ljiljana (Lil) V. Ciric

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 November 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 37-72 is/are pending in the application.
- 4a) Of the above claim(s) 44-48 and 51-72 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 37-43, 49 and 50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 20040330A, 20040330B, 20040330C, 20040401, 20040601, 20040924,
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of the first species in the reply filed on November 9, 2006 is acknowledged. However, the examiner disagrees with applicant's assertion that claims all of claims 37 through 70 read on all of the species described in the specification and cited by the examiner in the restriction requirement mailed on October 6, 2006.

2. At least claims 44 through 48 and 51 through 72 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species there being no allowable generic or linking claim. The subject matter of claims 44 through 48 and claims 51 through 72 is not covered by the description of the elected first species as outlined on page 2 of the specification, but rather is drawn to the other various non-elected species/embodiments as described on pages 3 and on of the specification.

Election was made **without** traverse in the reply filed on November 9, 2006.

Requirement for Information under 37 CFR 1.105

3. Applicant and the assignee of this application are required under 37 CFR 1.105 to provide the following information that the examiner has determined is reasonably necessary to the examination of this application.

4. Applicant has cited an extraordinary amount of prior art for the record. However, the relevance of the prior art is not clear, because many of the references do not appear to be quite relevant to the instant application. The information is required to enter in the record the art suggested by the applicant as relevant to this examination in the plural Information Disclosure Statements submitted thus far during the prosecution of the application. In particular, applicant is hereby required to specify which of the cited prior art is of significant relevance, as follows.

5. In response to this requirement, please provide the title and citation of each previously cited publication or prior art reference that is a source used for the description of the prior art in the disclosure.

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For each publication, please provide a concise explanation of that publication's contribution to the description of the prior art.

6. Also, in response to this requirement, please provide the title and citation of each previously provided publication that any of the applicants relied upon to develop the disclosed subject matter that describes the applicant's invention. For each publication, please provide a concise explanation of the reliance placed on that publication in the development of the disclosed subject matter.

7. Also, in response to this requirement, please provide the title and citation of each previously provided publication that any of the applicants relied upon to draft the claimed subject matter. For each publication, please provide a concise explanation of the reliance placed on that publication in distinguishing the claimed subject matter from the prior art.

8. Furthermore, in response to this requirement, please provide the names of any products or services that have incorporated the claimed subject matter.

9. In response to this requirement, please state the specific improvements of the subject matter in claims 37 through 43, 49, and 50 over the relevant disclosed prior art and indicate the specific elements in the claimed subject matter that provide those improvements. For those claims expressed as means or steps plus function, please provide the specific page and line numbers within the disclosure which describe the claimed structure and acts.

10. The fee and certification requirements of 37 CFR 1.97 are waived for those documents submitted in reply to this requirement. This waiver extends only to those documents within the scope of this requirement under 37 CFR 1.105 that are included in the applicant's first complete communication responding to this requirement. Any supplemental replies subsequent to the first communication responding to this requirement and any information disclosures beyond the scope of this requirement under 37 CFR 1.105 are subject to the fee and certification requirements of 37 CFR 1.97.

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11. The applicant is reminded that the reply to this requirement must be made with candor and good faith under 37 CFR 1.56. Where the applicant does not have or cannot readily obtain an item of required information, a statement that the item is unknown or cannot be readily obtained may be accepted as a complete reply to the requirement for that item.

12. This requirement is an attachment of the enclosed Office action. A complete reply to the enclosed Office action must include a complete reply to this requirement. The time period for reply to this requirement coincides with the time period for reply to the enclosed Office action.

Drawings

13. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the medium being laterally distributed in the heat exchanger must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

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14. The abstract of the disclosure is objected to because it refers to the purported merits of the invention (i.e., "in a concerted manner") and because it fails to clearly summarize the salient steps of the inventive method as claimed. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

15. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

16. Claims 37 through 43, 49, and 50 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

There is insufficient antecedent basis for the limitation "the at least one temperature value" as recited in the last line of claim 37.

The term "high" in claim 41 is a relative term which renders the claim indefinite. The term "high" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Thus, as used to describe the thermal capacitance of the medium, this term renders the same indefinite.

It is not clear what is meant by the limitations "the medium is laterally distributed in the heat exchanger" as recited in claim 42.

The limitations in claims 49 and 50 relative to the which temperature values the at least one temperature sensor measures appear to be contradictory to the limitations in base claim 37 from which claims 49 and 50 depend which state that the at least one temperature sensor is provided so as to be coupled to measure a temperature value of the at least one device being cooled, and not of the ambient air and also not of the fluid "at any point in the cooling system". It would appear that separate temperature sensors would be required for measuring the values recited in claims 49 and 50.

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Claim Rejections - 35 USC § 102

17. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

18. As best can be understood in view of the indefiniteness of the claim, claims 37 through 39, 49, and 50 are rejected under 35 U.S.C. 102(b) as being anticipated by Mitsubishi Motors Corporation (JP 10-208781).

Mitsubishi Motors Corporation discloses a method of controlling a fluid flow rate of at least one pump 16 and an air flow rate of at least one fan 26 in a cooling system for a plurality of batteries 4 which are part of an electronic system as broadly interpreted as required, including providing at least one temperature sensor 36 coupled to measure a temperature value of at least one battery 4 and providing a controller 40 to selectively control at least one of the fluid flow rate and the air flow rate based on the measured temperature value.

The reference thus reads on the claims.

Allowable Subject Matter

19. Claims 41 through 43 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

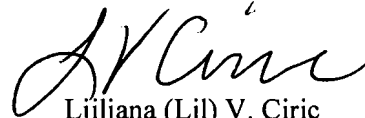
20. This Office action has an attached requirement for information under 37 CFR 1.105. A complete reply to this Office action must include a complete reply to the attached requirement for information. The time period for reply to the attached requirement coincides with the time period for reply to this Office action.

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21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ljiljana (Lil) V. Ciric whose telephone number is 571-272-4909. The examiner works a flexible schedule but can normally be reached between the hours of 10:30 a.m. and 6:30 p.m. on most weekdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl J. Tyler can be reached on 571-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Ljiljana (Lil) V. Ciric
Primary Examiner
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